



#9

Sequence Listing for.txt

<110> Stuart, Newman, et al.
<120> SPLICE CHOICE ANTAGONISTS AS THERAPEUTIC AGENTS
<130> 51230-00601
<140> 09/849,967
<141> 2001-05-08
<160> 4
<210> 1
<211> 1689
<212> DNA
<213> Chicken

<220>
<223> SEQ ID NO:1 Full length cDNA for chicken hnRNP A1

<400> 1
gcgtctccac ccctcagcgg gcggcgggtga gtgcgccagg ccagcgccgg cgtgggaccg 60
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gagttagagt acccttccaa aatggctgct attaaggaag agagagaggt ggaagattac 180
aagagaaaaa ggaagacgat cagcacaggc catgagccta aggagccaga gcagttgaga 240
aagctgttca ttggaggctc gagcttcgag acgacggatg atagcttgag agagcacttt 300
gaaaaatggg gcacactcac ggactgtgtg gtgatgagag acccacaac aaaacgttcc 360
agaggctttg cttttgttac ttactcttgc gtggaagagg tggatgcggc catgagcgct 420
cgaccacata aggtggatgg acgtgtggtt gaaccaaaga gagcagtttc aaggaggat 480
tctgtaaagc ctggggcgca tctcacagta aagaaaatat ttgttggtgg cattaagaa 540
gatacagaag aatataatct aagggggtac tttgaaacat atggcaagat cgaaacgata 600
gaagtcattg aagacagaca aagtggaaag aaaagaggct tcgcttttgt aacttttgat 660
gatcacgata cagttgataa aattgttgtt cagaaaatac atactataaa tggtcataac 720
tgcaagata aaaaagcact ctcaaaacaa gagatgcaga ctgccagctc tcagagaggt 780
cgtgggggtg gttcaggcaa cttcatgggt cgtggaaatt ttggagggtg tggaggaaac 840
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gagcgaggag ttgtcaggaa agctgcaggt tactttgaga cagtcgtccc aaatgcatta 1380
gaggaactgt aaaaactgcc acagaaggaa cgatgatcca tagtcagaaa agttactgca 1440
gcttaaacag gaaacccttc ttgttcagga ctgtcatagc cacagtttgc aaaaagagca 1500
gctattggtt aatgcaatgt agtgtcgtaa gatgtacatc ctgaggctct tatctgttgt 1560
agctttgtct ttcttttttc tttttatctt cccattacat caggtatatt gccctgtaaa 1620
ttgtggtagt ggtaccagga ataaacaaat taaggaattt ttggcttttc aaaaaaaaaa 1680
aaaaaaaaa 1689

<210> 2
<211> 378
<212> PRT
<213> Chicken

<220>
<223> SEQ ID NO:2 Amino acid sequence of chicken hnRNP A1

<400> 2
Met Ala Ala Ile Lys Glu Glu Arg Glu Val Glu Asp Tyr Lys Arg Lys
1 5 10 15

Sequence Listing for.txt

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Arg Lys Thr Ile Ser Thr Gly His Glu Pro Lys Glu Pro Glu Gln Leu
      20      25      30
Arg Lys Leu Phe Ile Gly Gly Leu Ser Phe Glu Thr Thr Asp Asp Ser
      35      40      45
Leu Arg Glu His Phe Glu Lys Trp Gly Thr Leu Thr Asp Cys Val Val
      50      55      60
Met Arg Asp Pro Gln Thr Lys Arg Ser Arg Gly Phe Gly Phe Val Thr
      65      70      75      80
Tyr Ser Cys Val Glu Val Asp Ala Ala Met Ser Ala Arg Pro His
      85      90      95
Lys Val Asp Gly Arg Val Val Glu Pro Lys Arg Ala Val Ser Arg Glu
      100      105      110
Asp Ser Val Lys Pro Gly Ala His Leu Thr Val Lys Lys Ile Phe Val
      115      120      125
Gly Gly Ile Lys Glu Asp Thr Glu Glu Tyr Asn Leu Arg Gly Tyr Phe
      130      135      140
Glu Thr Tyr Gly Lys Ile Glu Thr Ile Glu Val Met Glu Asp Arg Gln
      145      150      155      160
Ser Gly Lys Lys Arg Gly Phe Ala Phe Val Thr Phe Asp Asp His Asp
      165      170      175
Thr Val Asp Lys Ile Val Val Gln Lys Tyr His Thr Ile Asn Gly His
      180      185      190
Asn Cys Glu Asp Lys Lys Ala Leu Ser Lys Gln Glu Met Gln Thr Ala
      195      200      205
Ser Ser Gln Arg Gly Arg Gly Gly Ser Gly Asn Phe Met Gly Arg
      210      215      220
Gly Asn Phe Gly Gly Gly Gly Asn Phe Gly Arg Gly Gly Asn Phe
      225      230      235      240
Gly Gly Arg Gly Gly Tyr Gly Gly Gly Gly Gly Gly Gly Ser Arg
      245      250      255
Gly Ser Phe Gly Gly Gly Asp Gly Tyr Asn Gly Phe Gly Asp Gly Gly
      260      265      270
Asn Tyr Gly Gly Gly Pro Gly Tyr Gly Ser Arg Gly Gly Tyr Gly Gly
      275      280      285
Gly Gly Gly Pro Gly Tyr Gly Asn Pro Gly Gly Gly Tyr Gly Gly Gly
      290      295      300
Gly Gly Gly Tyr Gly Gly Tyr Asn Glu Gly Gly Asn Phe Gly Gly Gly
      305      310      315      320
Asn Tyr Gly Gly Ser Gly Asn Tyr Asn Asp Phe Gly Asn Tyr Ser Gly
      325      330      335
Gln Gln Gln Ser Asn Tyr Gly Pro Met Lys Gly Gly Gly Ser Phe Gly
      340      345      350
Gly Arg Ser Ser Gly Ser Pro Tyr Gly Gly Gly Tyr Gly Ser Gly Ser
      355      360      365
Gly Ser Gly Gly Tyr Gly Gly Arg Arg Phe
      370      375

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<210> 3
 <211> 314
 <212> PRT
 <213> Human

<220>
 <223> SEQ ID NO:3 Amino acid sequence of human hnRNP A1

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<400> 3
Pro Lys Glu Pro Glu Gln Leu Arg Lys Leu Phe Ile Gly Gly Leu Ser
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Phe Glu Thr Thr Asp Glu Ser Leu Arg Ser His Phe Glu Gln Trp Gly
      20      25      30
Thr Leu Thr Asp Cys Val Val Met Arg Asp Pro Asn Thr Lys Arg Ser
      35      40      45

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Sequence Listing for.txt

Arg Gly Phe Gly Phe Val Thr Tyr Ala Thr Val Glu Glu Val Asp Ala
50 55 60
Ala Met Asn Ala Arg Pro His Lys Val Asp Gly Arg Val Val Glu Pro
65 70 75 80
Lys Arg Ala Val Ser Arg Glu Asp Ser Gln Arg Pro Gly Ala His Leu
85 90 95
Thr Val Lys Lys Ile Phe Val Gly Gly Ile Lys Glu Asp Thr Glu Glu
100 105 110
His His Leu Arg Asp Tyr Phe Glu Gln Tyr Gly Lys Ile Glu Val Ile
115 120 125
Glu Ile Met Thr Asp Arg Gly Ser Gly Lys Lys Arg Gly Phe Ala Phe
130 135 140
Val Thr Phe Asp Asp His Asp Ser Val Asp Lys Ile Val Ile Gln Lys
145 150 155 160
Tyr His Thr Val Asn Gly His Asn Cys Glu Val Arg Lys Ala Leu Ser
165 170 175
Lys Gln Glu Met Ala Ser Ala Ser Ser Ser Gln Arg Gly Arg Ser Gly
180 185 190
Ser Gly Asn Phe Gly Gly Gly Arg Gly Gly Gly Phe Gly Gly Asn Asp
195 200 205
Asn Phe Gly Arg Gly Gly Asn Phe Ser Gly Arg Gly Gly Phe Gly Gly
210 215 220
Ser Arg Gly Gly Gly Gly Tyr Gly Gly Ser Gly Asp Gly Tyr Asn Gly
225 230 235 240
Phe Gly Asn Asp Gly Ser Asn Phe Gly Gly Gly Gly Ser Tyr Asn Asp
245 250 255
Phe Gly Asn Tyr Asn Asn Gln Ser Ser Asn Phe Gly Pro Met Lys Gly
260 265 270
Gly Asn Phe Gly Gly Arg Ser Ser Gly Pro Tyr Gly Gly Gly Gly Gln
275 280 285
Tyr Phe Ala Lys Pro Arg Asn Gln Gly Gly Tyr Gly Gly Ser Ser Ser
290 295 300
Ser Ser Ser Tyr Gly Ser Gly Arg Arg Phe
305 310

<210> 4
<211> 1136
<212> DNA
<213> Chicken

<220>
<223> SEQ ID NO:4 Open reading frame of cDNA for chicken hnRNP A1

<400> 4
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cagcacaggc catgagccta aggagccaga gcagttgaga aagctgttca ttggaggtct 120
gagcttcgag acgacggatg atagcttgag agagcacttt gaaaaatggg gcacactcac 180
ggactgtgtg gtgatgagag acccacaac aaaacgttcc agaggctttg gctttgttac 240
ttactcttgc gtggaagagg tggatgcggc catgagcgct cgaccacata aggtggatgg 300
acgtgtgtgt gaaccaaaga gacagtttc aagggaggat tctgtaaagc ctggggcgca 360
tctcacagta aagaaaatat ttgttggtgg cattaagaa gatacagaag aatataattt 420
aagggggtac ttgaaacat atggcaagat cgaaacgata gaagtcatgg aagacagaca 480
aagtggaaag aaaagaggct tcgcttttgt aacttttgat gatcacgata cagttgataa 540
aatgttgtt cagaaatacc atactataaa tggtcataac tgcgaagata aaaaagcact 600
ctcaaaacaa gagatgcaga ctgccagctc tcagagaggt cgtgggggtg gttcaggcaa 660
cttcatgggt cgtggaaatt ttggagggtg tggaggaaac tttggccgag gaggaaactt 720
tggtggaaga ggaggctatg ggggtggtgg tggcgggtgg gggagcagag gaagctttgg 780
gggtggtgat ggatacaacg gatttggtga tgggtggcaac tatggaggtg gtcctggcta 840
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atatggaggt ggaggaggag gatatggtgg ctacaatgaa ggaggcaatt ttggaggtgg 960
taattatgga ggcagtggaa actacaatga ctttggtaac tacagtggac agcagcagtc 1020
caattacggt cccatgaaag gtggtggcag ttttggtggt agaagttcag gcagtccta 1080

Sequence Listing for.txt 1136
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